

PROJECT TITLE : Pilot Plant Operations
PERIOD COVERED : September 1st - 26th, 1980
WRITTEN BY : N. Lüthi

The second extended period of NINO trials started on September 1st. Since then the NINO process has been running continuously, 24 hours per day, weekend included.

1. EQUIPMENT

1.1. Liquor clean-up

During the start-up phase of the rented disk centrifuge quite a few problems had to be solved. Finally the centrifuge has been working to our satisfaction but it has to be cleaned completely once per shift.

First analyses showed much better fiber separation as compared with the old basket filter.

1.2. Dryer

The power transmission of the drive of the gas dryer had to be modified. Instead of belts we are now using a chaine. In order to get a better efficiency of the gas burners some of them had to be modified.

1.3. Sterilization and pasteurization line of the extract

At the beginning of the new period of NINO trials some clogging problems were observed in the sterilization as well as in the pasteurization lines of the extract.

Since the centrifuge for the liquor clean-up is working well no other cloggings were observed.

1.4. Fermenter

Some electronic problems were observed with the pO_2 measuring. The problems could be solved by the FTR electronics department.

1.5. Centrifuge for NINOMASS separation

Since September 1st two failures of the centrifuge motor were observed.

Contact was taken with the FTR electrical department. It was decided to send the motor to an external electrical specialist for control and repairing. Until the return of the motor we are using the rented centrifuge for the NINOMASS separation.

1.6. Evaporation

The motor of the distillate pump broke down. A new motor has been installed.

2. MATERIALS

2.1. Extract of NINO trial 57

All the drums in Onnens were again checked in order to control the plugs (Ref. 1).

By opening the drums a high pressure was found and most of the plugs were again strongly corroded. Therefore it was decided to take all the drums back and to destroy the extract.

Since the new period of NINO trials we are using plastic plugs instead of aluminium.

3. LABORATORY

3.1. The Auto Analyzer Technicon arrived at the end of August and was installed.

3.2. Our laboratory technician has followed a training course for the Auto Analyzer organized by Technicon France (Ref. 2). He will now be able to operate the Auto Analyzer.

4. REFERENCES

Ref. 1 : Monthly report, June 1980, Pilot Plant Operations by N. Lüthi

Ref. 2 : Memo to C. Ruf from J.-M. Chassot, Cours Technicon AA II, September 25th, 1980.

PROCESS DEVELOPMENT

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NIL/sde
September 30th, 1980